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# **Rise of the Gold Market in China: Liberalization and Market Development**

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## **Abstract**

The Chinese gold market is rapidly rising to global prominence. The paper overviews the brief history of the gold market in China since 1949 and its liberalisation process in recent decades amid the country's opening to the outside world. Details of the current market structure and its main business are presented. Global impacts of the rise of the Chinese gold market are discussed.

This paper provides an overview of Chinese financial and trade integration in recent decades, and the challenges facing China in the coming years. China had been a prime example of exported growth, benefiting from learning by doing, and by adopting foreign know-how, supported by a complex industrial policy. While the resultant growth has been spectacular, it comes with hidden but growing costs and distortions. The Chinese export-led growth path has been challenged by its own success, and the Global Financial Crisis forced China toward rebalancing, which is a work in progress. Reflecting on the internationalization of the CNY, one expects the rapid accelerating of the commercial internationalization of the CNY.

**Jef codes:** E31 F33 G15 L72 Q31

**Key words:** Gold market; Financial liberalisation; Chinese economy; International finance

# 1. Introduction

Gold is a precious metal that has both the characteristics of monetary and commodity assets. For centuries, gold has acted as a store of wealth, medium of exchange and a unit of value, as well as jewellery and industrial components (Goodman 1956; Solt and Swanson 1981). Many mature markets for gold have existed around the world, such as the gold markets in London, Zurich, New York and Hong Kong. While these markets usually have the greatest attention of the world, the emerging Chinese gold market proves a market of growing importance.

This paper overviews the Chinese financial and trade integration in recent decades. We start by evaluating the history of Chinese growth-cum-financial policies, arguing that the export-led growth of China was a highly successful policy, as has been vividly illustrated by the unprecedented catching up of Chinese size with the U.S. [either in current dollar or adjusted for PPP]. Yet, the remarkable success of this process sowed its end, and the need for China to rebalance its economy. Looking forward, we point out the logic of sequencing financial reforms. While one expects the rapid acceleration of commercial internationalization of the CNY, and the growing use of

CNY in the sphere of Chinese commercial and outward FDI transactions, there are no clear-cut reasons to rush with the full CNY internationalization. Chances are that the gains from a rapid CNY financial internationalization may be overrated, and ignoring the downsides of this process would be to Chinese (and probably global) peril.

## **2. Liberalisation of China's Gold Market**

### **2.1 The Pre-reform Period: A brief history**

The formal history of modern gold market in China started on 13 November 1921 when Shanghai Gold Industry Exchange was founded (Dai and Shi, 2003). The main trading medium on the exchange was standard gold and in the 1920s it was ranked third largest in the world in terms of trading volume, after London and New York (Yang 1932). The market was closed in 1937 because of the Second World War and re-opened in 1945. The founding of the People's Republic of China in 1949 disrupted the brief reopening of the Chinese gold market when the government closed down the exchange and forbade the trading of gold, in a bid to establish the renminbi (RMB) as China's new legal tender and to stabilize the general price of the domestic economy.

The Chinese regulator issued a notice in April 1950 entitled Methods for Gold and Silver Management, prohibiting any private trading in gold and silver and imposing strict controls over all mined gold. Specifically, the notice regulated that all the gold mined or produced by gold companies in China be sold to People's Bank of China (PBOC) at the price set by the state, which was 95 yuan/liang or about 3.04 yuan/g at the time (Zhang and Guo 2009)<sup>1</sup>. Gold was to be allocated by the People's Bank of China, according to production needs of various industries. The bank also had a controlling power over all external trade in gold by Chinese agents. The notice had a long lasting effect in China, remaining the regulatory basis of China's state monopoly over gold by way of a system of centralized gold purchase and allocation until the 1980s (Ye 2003).

From 1957 when the second-five-year-plan started, China extended the centralized gold controls from gold production to all aspects of gold supply. To stimulate gold supply, the state purchasing price was increased to 3.528 yuan/g in 1957 and then hiked four times to finally reach 7.68 yuan/g in 1963 (China Gold Yearbook 2009). While gold price was adjusted to reflect international price movements and domestic resource scarcity, market trading of gold (and silver) remained prohibited. Domestic units needing gold as raw material had to apply to PBOC for obtaining allocation.

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<sup>1</sup> Liang is a Chinese weight measurement unit. One unit of liang equals to 31.25grams. Yuan is the basic Chinese currency unit.

## **2.2 The Liberalisation Process**

China has gradually opened the gold market since 1979 when the nation launched market-oriented economic reforms. The opening-up of the gold market was initially slow and timid. In 1979, PBOC started to issue gold coins for private consumption. In 1982, sales of gold jewellery were resumed. But trading of gold as industrial raw material or investment assets remained a controlled business firmly under the state monopoly. On June 15, 1983, the State Council of China issued Regulation for Gold and Silver, stipulating that gold and silver were to be under unified management, meaning that their purchase and allocation were subject to state centralised control (Ye, 2003; Zhang and Guo, 2009). All proceeds from selling, or expenditure on buying gold and silver by Chinese government units and collective organizations were subject to central planning by way of a consolidated national plan. Any enterprise or individual must sell mined gold to the PBOC (which became China's central bank in 1984) and gold price was to be uniformly (meaning centrally) set by PBOC. All enterprises or individuals wanting to engage in gold jewellery crafting, or in gold wholesale and retail businesses, gold processing operations and even in gold waste recovery must obtain approval from the central bank.

With the development of economic reforms, China steadily moves to a market economy. To meet rising consumer demands for gold and to support both the gold-producing and gold-using enterprises, steps are taken to reform China's gold policy. These include the measures that are intended to reform the gold pricing mechanism, the supply system, the administrative examination and approval in relation to gold jewellery sales. But initially, the general framework of the centralized gold purchase and allocation was unscratched (Ye, 2003).

In 1993, the PBOC lifted the fixed pricing on gold to adopt a scheme allowing periodical price adjustments according to international price movements. The spread between the purchase and sale's prices initially remained at a fixed 10 percent, but adjustment of the state purchasing price of gold became a frequent occurrence (Table 1). The central bank later adjusted gold price at irregular intervals and the spread between purchase and sale prices narrowed to 2 percent in 1998. On 11 June 2001, the central bank launched the one-week gold quotation system, under which the quote was valid for one week, and adjusted the Chinese gold price to international prices.

**<Table 1 about here>**

Table 1 records the adjustments of gold purchasing price by People's Bank of China, showing the reform process in which the Chinese gold price was gradually allowed leeways to move. In the late 1990's, China promised to open its gold market in the negotiations for entry into the World Trade Organisation (WTO), as a crucial step in opening China's financial markets (Chen, 2003). In October 2000, a research group of the State Council's Development Research Centre published a report on opening China's gold market. Then in 2000, the establishment of the gold market was listed in China's fifth Outline of National Economic and Social Development as an official pledge. One year later, the PGOC announced cancellation of the centralised management of gold and silver and setting-up of the Shanghai Gold Exchange in April 2001. Shanghai Gold Exchange came into trial operation on 28 November 2001.

### 2.3 The Shanghai Gold Exchange

The Shanghai Gold Exchange, SGE thereafter, was officially opened on 30 October 2002 for full business. Its chief mission is designated to organise gold transaction with openness, fairness, justice and honesty. As a non-profit and self-managing legal entity, SGE adopts a membership system. The members consist of qualified commercial banks and firms registered in China and are examined and approved by the PBOC to produce, melt, process, wholesale, import and export precious metals including gold,



silver, platinum, etc. On the Exchange, members trade in gold, silver and platinum among themselves.

The foundation of SGE remarks the official reopening of China's gold market (Li, Hu and Kong 2003; Zhen 2009; Wang, 2009). From the onset of its operation, the price of standard gold is decided according to the trading price on SGE. For non-standard gold, the price was set monthly by PBOC until 2004 when the central bank stopped setting this price. Now, the prices of both standard and non-standard gold are determined on the basis of the transaction prices on SGE.

Subsequent to the institution of SGE, other liberalising steps continue to emerge. To open the gold commodity market, the Chinese monetary authority abolished the system of administrative examination and approval. An industrial and commercial registration system is set up for enterprises engaged in gold production, processing and distribution in April 2003(Wang, 2009). As the nation's main designated bank in foreign exchange, the Bank of China started the business known as "Gold Bao" (gold treasure) on 18 November 2003 in Shanghai, which is a type of paper gold business open to individuals. This business preludes commercial banks' participation in the Chinese gold market and provides leeway for private individuals to participate in the

gold market. The Industrial and Commercial Bank and Shanghai Gold Exchange then jointly launched investment business in physical gold for private individuals on 18 July 2005, allowing individuals to invest and trade in gold on the Exchange, which had been long prohibited in China. In December 2006, Bank of China launched gold options for individual investors known as “Qi Jin Bao” (options in gold treasure) and “Liang Jin Bao”(double options in gold treasure). Then on 9 January 2008, China officially opened the gold futures market on Shanghai Futures Exchange. The development of China’s gold market enters a new phase.

### **3. Gold Supply and Demand in China**

Liberalization of China's gold market has enabled Chinese demand for gold to grow energetically. China now boasts being the world's second largest consumer of gold after India according to the World Gold Council. China in 2009 consumed more than 140 billion U.S. dollars of gold, about 11% of the world's total gold consumption and the consumption is expected to double in the next decade. In the meantime, the supply of gold in China is expanding steadily. China became the world’s second largest gold producer, next to South Africa in 2006, and has been the largest one from 2007(China

Gold Yearbook, 2010). Figure 1 shows evolvement of supply of and demand for gold in China from 1989 to 2011.

**<Figure 1 about here>**

### **3.1 Gold Supply**

Gold supply includes those of mineral and non-mineral gold. Of which, mineral gold production takes the lion's share of China's total gold supply. China became one of the world's largest mineral gold producers from 2007 with gold output of 240.08 tons that year. The total output in 2008 reached 292 tons and the output of 2009 was more than 300 tons. Tables 2.a and 2.b show the top 10 gold producers in the world from 2008 to 2011.

**<Table 2a about here>**

**<Table 2.b about here>**

The availability of geological gold resources is the determining factor of the supply of mineral gold. According to China Gold Association, China's total reserves of gold were 5951.79 tons in 2009, ranked the seventh in the world. Figure 2 shows the proved reserves and the mineral reserves in China. Whereas the proved reserves increased from 2003 to 2009, the mineral reserves declined because some of China's

gold deposits are difficult to mine. But the aggregate output of mineral gold increased from 2000 to 2011, as can be seen in Figure 3.

**<Figure 2 about here>**

**<Figure 3 about here>**

China's non-mineral gold supply is composed of imported gold and recycled gold. Supply of this category has been increasing rapidly from 2001 (Table 3). In 2001, recycled gold was 22 tons and by 2011, it reached 405.82 tons.

**<Table 3 about here>**

Gold import and export were strictly controlled by the government before the opening-up of China's gold market. During the market liberalisation process, state owned banks are granted permission to import and export gold. But figures of these businesses are not made public domain. One may however derive from publically available data China's main gold imports in terms of gold jewellery and other products. Table 4 reports the estimates for 2004 - 2008.

**<Table 4 about here>**

## **3.2 Gold Demand**

China's gold demand is mainly represented by investment and industrial demands including demand for jewellery and industrial raw material. The industrial demand constitutes the bulk of gold consumption. China is ranked the second largest consumer in the world after India in terms of industrial demand for gold from 2005 (Figure 4). While industrial demand for gold is declining in the world top demanders such as India, the USA, Japan, Italia and Turkey, it is steadily trending upwards in China.

**<Figure 4 about here>**

The bulk of China's gold demand is for jewellery, accounting for about 94 percent of the total on average over 1989 to 2011 (Table 5 and Figures 5.a and 5.b). The remainders are mainly demand from the electronic industry and others such as the dental use, etc.

**<Table 5 about here>**

**<Figure 5.a about here>**

**<Figure 5.b about here>**

In the 1990s, gold investment accounted for about 10 per cent of China's total gold demand and was mainly in the form of demand for gold coins. This demand declined sharply during the 1997-98 Asian financial crises. Since 2001, China has seen rapid growth in the demand for gold (Figure 5.1 and Figure 5.2). The total investment demand for gold was only 5.9 tons in 2002, and rose to nearly 260 tons in 2011. The investment gold demand includes two types, i.e. gold bars and gold coins (Table 6). Investment in gold bars is the main type and has experienced rapid growth in recent years. This demand was only 5 tons in 2000 and sharply rose all the way to 250.3 tons in 2011. The demand for gold coins was much smaller by comparison. A total of 20.5 tons of gold was consumed for producing gold coins in 2011.

**<Table 6 about here>**

### **3.3 Demand for Official Gold Reserves**

China's gold and silver reserves stood at about 275 million dollars in value according to a report by Associated Press on 25th Mar 1949. The new socialist regime came to power with a tiny amount of gold, obtained mainly from expropriating the gold from the riches under the old regime. The Chinese National Archives show that, when the new regime came to power in 1949, it inherited from the Nationalist Government a

gold stock of around 60,000 liang, or 1875 kilos (Chen, 2009). As the exclusive buyer of all gold in China, the People's Bank of China is empowered by law to require all domestic producers and individuals to sell gold to the bank at the price set by the state. This centralised acquisition enables the monetary authority to collect as much as possible the gold stocks within China, which in turn it uses to accumulate the nation's gold reserves. By 1952, China's official gold reserves reached 5,000,000 ounces or about 155,500 kilos. Subsequent years saw China hitting by various natural disasters and political turmoil, leading its gold reserves to decline, particularly in the late 1950s and early 1960s. It was not until 1965 that China managed to restore the gold reserves to its previous level of 5,000,000 ounces in the early 1950s.

From 1965, China's gold reserves experienced a steady increase, to reach 9,000,000 ounces by 1973. Then in the face of great international monetary turmoil, China dramatically increased its gold reserve holdings in 1974 to the level of 12,800,000 ounces, which China maintained until year 1980. This was to decline to 12,670,000 ounces in 1981 due to overheating of the economy that pushed up imports. China maintained this level until the end of year 2000 when it started to increase gold reserves again. In 2001 China's gold reserves increased to 16,080,000 ounces and in 2002 further increased to 19,290,000 ounces. By 2011, China holds a total of

33,890,000 ounces, or 1054 metric tons, official gold reserves. Figure 6 shows China's accumulation of gold reserves from 1952 to 2011.

**<Figure 6 about here>**

China is ranked 6<sup>th</sup> in the 2011 world league table of official gold reserve holders (including IMF), see Table 7. But in terms of the absolute level, China's gold stocks are only about one eighth of the top country, the USA. Relative to its colossal reserve holdings, the growth of China's gold reserves has been depressively slow. In China's total reserve holdings, the proportion of gold was only 0.9% by 2008. This ratio subsequently experienced some increase, but only moderately. The composition of gold rose to 1.5% in 2009 and to 1.8% in 2010, but was largely caused by the revaluation effect of the dramatic increase of gold price in these years. In comparison, the proportions of gold in total reserves of the United States, Germany, Italy and France are all greater than 60% in 2010. The Chinese gold composition is the lowest among the top 20 holders of gold (Table 7).

**<Table 7 about here>**



One reason for this low proportion is historical since the initial level of China's official gold reserves was very low. The other reason could be due to China's financial underdevelopment, including incompleteness of financial markets in China, the underdevelopment of the gold market and imperfections of foreign reserve management (Wang and Wu 2010). One manifestation of China's problematic management of foreign reserves is its unchecked rapid accumulation of foreign reserves. China's total international reserves including gold stood at about 100 billion dollars in 1996 and by 2009 its level has surged by almost 24 times to 2399.2 billion dollars. In the meantime, the composition of the reserves is heavily lean towards the dollar assets (Wang 2005 and Zhang 2009).

Given China's low gold reserves in absolute and relative terms, there is much room for Chinese demand for gold reserves to grow. Against this backdrop, calls are mounting within China for increasing official gold holdings (Yin, 2004; Zhou, 2005, 2007; Zhang, 2008; Chen, 2009; Jing, 2009; Ma, 2010). There are even calls for the government to encourage private citizens to hoard gold (Zhou, 2005, 2007; Chen, 2009).

Some have cautioned about rushing into accumulating gold reserves for fear of a too high cost given the rising gold price in recent years (Chen,2009;Jia and Dong, 2009). Research now is taking place in China to investigate into the optimal level of gold in China's total reserves and the optimal gold composition thereof. For the desired mixture of gold in the total reserves, Yin (2004) suggests that the appropriate proportion of gold be 6-8% of the total reserves. Shi and Cao's (2011) proposal is in the similar range, of 5.87% on the basis of the gold's dual function as a reserve asset and a hedging medium. Wang (2005) maintains that China should increase the proportion of gold reserves to 5%-10%. Although so far there seems no consensus among Chinese researchers on a particular optimal benchmark, the general agreement is the level of Chinese gold reserves is too level and should be raised. This foretells that in the future years Chinese demand for gold as a reserve asset will insistently increase.

#### **4. Current Structure of the Chinese Gold Market**

China now boasts a gold market system consisting of the Shanghai Gold Exchange, regional gold trading centres, the Shanghai Futures Exchange and bank counters and stores in gold objects (Wang,2009;Shang and Wang, 2010 ; Zhou,2010). At the centre

of this system is the SGE that provides a trading platform for the members and the price information flowing from the Exchange provides guidance to gold transactions across the nation. Regional gold trading centres are set up by the members of SGE. They are a secondary trading market mainly dealing with members' self-, and agent-based gold business. The Shanghai Futures Exchange mainly conducts gold futures business, providing hedging facilities for investors. As such, the Gold Futures, together with bank counters and stores for gold objects, provide a marketplace for individual investors and private consumers.

#### **4.1 Trading on Shanghai Gold Exchange**

SGE plays a pivotal role in the entire system of China's gold trading system. SGE trades in standard gold following the principle of "price-time priority" under which orders are first ranked according to their prices; orders of the same price are then ranked depending on when they are entered. This means that for the transaction book, orders with the best price has the priority to be executed and if the price of two or more orders is the same, those that arrived earlier in time are to be first executed.

SGE employs a transaction mode that it intends to promote free quotation, computer matching, centralized settlement and delivery. The unit of quotation is RMB

yuan/gram. The minimum tick size is 0.01yuan/gram. SGE can also provide inquiry transactions for non-standard trading. Gold traded on SGE must have qualified standard for gold bullion bars and be produced by corporations recognised by SGE or LMBA (the London Bullion Market Association). Members can choose on-the-spot trade or remote trade through the computer network via the SGE trading system. Trading hours are Monday to Friday 9:00-11:30 am, 13:30-15:30pm, and 21:00pm.-2:30 am (Fridays have no trade at night), Beijing time, except public holidays.

Eight gold varieties are traded on SGE, i.e., Au99.95, Au99.99, Au50g, Au100g, Au(T+5), Au(T+D), Au(T+N1) and Au(T+N2). Table 8 reports details of every variety. Among the spot gold varieties, Au100g, Au99.99, Au99.95 and Au50g are of a purity no less than 99.99% fine gold and weighs 1000g, 100g and 50g, respectively. Au99.95 has a purity of no less than 99.95 fine gold and weighs 3,000g. Individual clients are allowed to trade only in Au100g, Au99.99 and Au99.95.

**<Table 8 about here>**

On SGE, the spot gold varieties are to be traded in full amount. Before placing a purchasing order, the buyer shall deposit sufficient funds in her SGE account based on

the real-time gold price. Sellers must have a full amount of physical gold in its SGE account, which should be under SGE's control, before placing a selling order. With respect to the transfer of gold, the buyer shall pick up the physical gold at the designated vault and at the agreed time.

Varieties for deferred spot trading include Au (T+D), Au (T+5), Au (T+N1) and Au (T+N2). These varieties generate the opening price by call auction ten minutes before the official opening time for trading. The extended trading of gold trades on margin, which is 10% of the total value of the contract. Au (T+D) refers to a spot trading arrangement where members and their clients can complete the delivery on the contracted trading day or postpone it until the following trading day. Au (T+N1) and Au (T+N2) are the supplement and the extension of Au (T+D). The main difference between them is the payment time. The deferred compensation for Au (T+D) shall be paid on a daily basis; but for Au (T+N) it is on a bimonthly basis. The payment of Au (T+N1) is made on the last trading day of an odd month and that of Au (T+N2) is on the last trading day of an even month. The rate for deferred payment of Au (T+D) is 0.02 percent per day while the rate for Au(T+N) is 1 percent every two months and is paid at the end of the month. These varieties introduce a deferred compensation mechanism to strike a balance between supply and demand.

SGE conducts settlements with "T+0", i.e. it takes out funds from the buyer member's account and transfers them to the seller's account. On the next business day, SGE transfers funds to the seller member's account in the settlement bank. For the delivery, SGE adopts the principle of "choosing depositing and delivery warehouses ". It has set up 41 assigned warehouses in 34 cities over the country to facilitate members' gold stocking and delivery. Gold trading volume and value on SGE are growing rapidly from 2003, as showed in Figure 7.

**<Figure 7 about here>**

The total trading volume of gold for 2003 was only 235.35 tons or 22.96 billion yuan in value. Gold traded on SGE reached 665.3 tons in 2004, up by 182.7 percent year on year. In terms of value in RMB, it is of 73.1 billion yuan, up by 218.35 percent year on year. The trading value and volume continued to grow steadily from 2004 to 2007 with an average annual growth rate of 40% for the period. In 2007, gold trading volume was 1828.13 tons, which is valued 869.6 billion yuan. There was a jump in the trading volume in 2008 likely induced by the global financial turmoil. The trading

volume in 2008 recorded 4463.77 tons which was almost 2.4 times of that in 2007.

Gold traded on SGE reached 7438.46 tons in 2011.

Table 9 reports the trading volume of various gold varieties. Among them, the main ones are AU99.99, AU99.95 and Au (T+D). The trading volume of Au99.95 grows in a stationary rate. The trading volume of AU99.99 is less than Au99.95, but grows much quickly. The top one in terms of trading volume is Au (T+D).

**<Table 9 about here>**

The membership system adopted by SGE consist of three types: 1). Financial members whose membership fee is RMB800,000 yuan plus an annual fee of RMB50,000 yuan. These members may either conduct their own business or act as an agent, or other approved business. 2). General members. They conduct own business or act as agent, paying RMB500,000yuan for the membership fee and RMB40,000 yuan for the annual fee. 3). Principal members. They conduct their own business, and pay the membership fee of RMB300, 000 yuan, and an annual fee of RMB30, 000 yuan. By the end of Oct. 2010, SGE has 163 members, including 25 financial members, 5 foreign bank members namely HSBC Bank (China), The Bank of Nova Scotia bank's Guangzhou Branch, Standard Chartered Bank (China), the Australia

and New Zealand Bank (Shanghai Branch), Credit Suisse Bank Shanghai Branch. In addition, there are 130 general members and 3 principal members.

Institutional investors can participate in the gold trade business through entrusting the financial and general members. Individuals can only entrust the financial members to conduct gold trade. Non-members first should become clients of members who can act as agents, sign the trade agreements with the members and fill in the account opening form. The transaction commission fee is specified in the trade agreements. The member then apply to the Exchange for a client code. The Exchange implements a system of one customer-one code and distinguishes the agent business from the principal business of the members by the client code. The physical gold delivery is completed through members.

Since its founding, SGE has made impressive progress in promoting an investment structure under which a variety of investors perform their respective functions, which is beneficial for a robust and sustainable development of the whole market. When the SGE was first founded, the main participants in the gold trading were confined to officially approved members only. Now, a growing number of institutional and individual investors is actively taking part in the market. The percentage of principal



business of SGE members is declining, though it still accounts for more than 50 percent of the total trade volume. The principal business of SGE members traded a total of 2672.68 tons of gold, or 56.73 percent of the total trading volume on SGE in 2009 and 3261.51 tons in 2010, about 54 percent of the total.

The China Gold Market Report (2009) indicates that the number of non-member clients of SGE totalled 923,900, of which 918,500 are individual clients by the end of 2009. Individual clients traded a total of 438.54 tons of gold, accounting for 9.31 percent of the total gold traded on SGE in 2009. There were 5,434 institutions on SGE in 2009, representing 0.58 percent of the total. But their trading volume reached 1599.6 tons, accounting for 33.96 percent of the total on SGE.

Commercial banks were the most active market participants, whose agency trading business grew rapidly. Commercial banks traded a total of 2242.07 tons of gold, or 47.60 percent of the total in 2009, an increase of 7.28 percentage points compared to 2008. The principal business grew steadily, accounting for 34.51 percent of the figure since 2008. Agency business by commercial banks grew steadily, taking a significantly greater share of the total agency business on SGE. In 2009, agency gold trading by commercial banks reached 616.48 tons, 2.40 times those of 2008, or 30.25

percent of the total agency business. Along with the increase of trade volume, the price of gold in China shows a growing degree of flexibility. Figure 8 shows the weekly K graph of Au (T+D) from October 2004 to December 2010. The lowest price of Au (T+D) in 2004 was 106.35, but by 2010 it increased to 306.20.

**<Figure 8 about here>**

Figure 9 illustrates daily prices of Au 99.99 and the London PM fixing price over 30 October 2002 to 29 December 2011. There was a big jump of price volatility in 2008. China's gold prices were in line with the international price levels, especially from 2008 to 2010. According to the China Gold Market Report (2009), of 244 trading days in 2009, there were 188 days that China's gold prices were higher than the international prices and 56 days were lower. The average price difference between the Chinese and international gold prices was 0.36 yuan/g in 2009.

**<Figure 9 about here>**

## **4.2 Gold Futures Market**

China's gold futures market started operation on Shanghai Futures Exchange on 9 January 2008. It trades in 12 contracts under the centralized call auction through a

computerized automatic trading system. The trading also follows the rule of "price - time priority". The trading unit is 1 kilogram/lot quoted by yuan/gram within a range of 5% above or below the settlement price of the previous trading day. The minimum transaction margin is 7% of the contract value (Table 10).

**<Table 10 about here>**

Shanghai Futures Exchange offers two types of memberships, i.e. brokerage members and proprietary members. Institutional and individual investors who appoint brokerage members to trade on or through the facilities of the Exchange shall open an account and register with the Exchange in advance. The Exchange adopts a daily non-indebtedness clearing system and a margin system. The trading margin of gold contract is much higher than other contracts and it changes with the trading time. Table 11 illustrates details of the trading margin of gold contracts.

**<Table 11 about here>**

At the end of the trading day, the Exchange will settle the profit or loss, the trading margin, trading fees and other items for each member. Members may obtain the

clearing data through their service system. If the balance of members' margin is below the specified minimum, they should supplement the shortage with more money. Members must keep the clearing margins at least at the minimum level before the opening of next trading day. Otherwise, they cannot open new positions. The Exchange will close out their positions by force if their clearing margin is below zero. To control investment risks, the Exchange specifies the largest allowable open positions. Table 12 reports the particular position limits when the total open positions are more than 80 thousand lots.

**<Table 12 about here>**

After the last trading day, the physical delivery of gold shall be made for the opening contracts. The delivery can only be made in the name of the members, so the investors have to make a delivery through their appointed members of the Exchange. In a physical delivery, members are required to submit the payment and delivery documents to the Exchange within the stipulated time. The Exchange shall allocate the standard warrants to members with a long position under the policy of time priority, fraction-truncation for the quantity of underlying assets, neighbour matching and overall planning.

A total of 7.781 million lots, or 7,781 tons were traded in 2008 with 897 kilogram being delivered. The trading value was 1497 billion yuan. A total of 6.812 million lots, or 6,812 tons, were traded in 2009, down by 12.45 percent year on year (see Figure 10). However in 2011 the volume of gold futures come back to 7.221 million lots. The average daily trading volume for 2011 was 29,590 lots, while the trading value reached 2.550 trillion yuan (see Figure 11).

**<Figure 10 about here>**

**<Figure 11 about here>**

The price of gold traded on Shanghai Futures Exchange fluctuated sharply with a general tendency of trending upward (Figure 12). In terms of trade volume, the Shanghai Futures Exchange is ranked 7<sup>th</sup> globally in 2009. But the total volume of gold traded on Shanghai Futures Exchange was less than 10 percent of that on New York Mercantile Exchange in 2009.

**<Figure 12 about here>**

### **4.3 The Over-the-Counter Market**

In addition to the trading on Shanghai Gold Exchange and Shanghai Futures Exchange, the “over the counter” (OTC) market for gold transaction is flourishing in China. The most important business of this market is the gold businesses conducted by commercial banks, including account/paper gold business, brand gold sales and repos, gold leasing business, gold depository plan, gold consignment business. Table 13 gives a summary of the OTC gold businesses of commercial banks from 2007 to 2011 in China.

**<Table 13 about here>**

The account gold business, also known as paper gold business in China, is the most important gold business operated by Chinese commercial bank. In this business, individual investors purchase paper gold and sell it for a profit when gold price rises, which involves no change-over of physical gold. The commercial bank gains income from the bid-ask spread in its trading with investors. The paper gold business may be denominated in the RMB and USD, respectively. By the end of 2009, four commercial banks are engaged in business, i.e. Bank of China (BOC), Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB) and China

Citic Bank (CITIC). Table 14 shows details of the paper gold business by the four banks.

**<Table 14 about here>**

## 5. Looking Forward

Prior to the global financial crisis, observers noted the possibility of converging toward a multi-polar global currencies structure. A possible tri-polar configuration would include the U.S. dollar, dominating the U.S. sphere of influence in the Americas; the euro, dominating the EU sphere of influence; and the CNY-anchored system, dominating eastern Asia. In principle, a multi-polar configuration is less stable than a unipolar stable configuration, yet it may be more stable than an unstable unipolar configuration; a multi-polar system may better fit the underlying forces shaping the global redistribution of power. Paradoxically, the GFC vividly illustrated both the susceptibility of the global economy to instability propagated from the U.S., and the remaining dominance of the U.S. dollar as “a safe haven” at times of global turbulence. While the wish of China to internalize the CNY is understandable, the speed of the converging toward multiple reserve world currencies would be endogenously determined. The CNY and the Euro are yet to pass the test of a viable global currency buffered by liquid global bond markets in these currencies. The U.S.

dollar is a mixed bag; it is blessed with the most liquid global bond market, yet the U.S. was the epicenter of the 2008-9 crisis, the source of global instability. However, once the crisis took place, the U.S. provided important global insurance services: bailing out Fannie Mae, Freddie Mac, and AIG in ways that shielded global players from the brunt of the crisis. The speed of moving toward the multi-polar configuration will be determined by China's ability to navigate its internal balancing, increasing its financial liberalization without a deep crisis, and by the Eurozone's ability to manage properly an exit from the present crisis, possibly moving toward the formation of a deep euro bond market. The transition may be slower if the U.S. deals properly with its fiscal and monetary overhang. Chances are that this process would be time-consuming, exposing the global economy to more turbulence, but this is a volatility that the world economy has been learning to live with.

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